Chronic health conditions are being reported in more than half of American schoolchildren, (1.) with conditions such as allergies, learning and behavioral issues, asthma, chronic ear infections, and autism spectrum disorder occurring at increasing rates. The cause of the increasing health problems of our children is not clear. Vaccinations have been both blamed and exonerated in this debate.

(2.)

To determine whether the increasing vaccination schedule had any association with these disabilities, a preliminary fact finding mission was undertaken to assess the difference in health between vaccinated and unvaccinated children. Further studies are planned. Families were located in which some of the children were fully or partially vaccinated, and other children in the same household were completely unvaccinated. The families were identified through flyers left in doctors' offices and emails to homeschool groups. Any family meeting this description and willing to participate was included.

Methods: Thirty-five families, which included 200 children, participated in the project. Most of the families lived in Michigan, but there were also families from Virginia, Colorado, and Indiana. Conversations with the parents were carried out by telephone or in person, and the following information for each child was recorded: birth year, gender, whether vaccinated according to CDC recommendations for children born in that year, variations in following the schedule, and chronic health conditions occurring

before the age of 18. The participants were born between 1970 and 2017, which provided an opportunity to compare changing vaccine schedules.

Family #13, 5 children, 4 immunized

M/F	Birth Year	Immunizations	Variations	Childhood Chronic Health Conditions
М	1970	State of Mich. Rec.		Allergies to food and inhalants; ear infections
М	1974	State of Mich. Rec.		Allergies and ear infections
F	1976	State of Mich. Rec.		Allergies and ear infections
М	1986	State of Mich. Rec.	stopped after MMR	Allergies
F	1991			

Figure 1: An Example of a Family Interview

Results: Of the 200 children, 124, or 62% were fully or partially vaccinated, and 76(38%) were completely unvaccinated. Of the vaccinated children 68% were reported to have a chronic health condition, while 20% of the unvaccinated children did. Most of the children suffering from a chronic health condition had more than one complaint.

Table 1- Four possible outcomes for each child

Vaccinated with a health issue: 84 children (68%).

(14 (17%) were fully vaccinated

Vaccinated and healthy: 40 children (32%). 4(10%) were fully vaccinated.)

Unvaccinated with a health issue: 15 children (20%)

Unvaccinated and healthy: 61 children (80%)

Table 2 - Most Frequently Reported Conditions

Condition	frequency in vaccinated	frequency in unvaccinated
Allergies	1 in 5	1 in 10
Learning &		
Behavioral Problems*	*1 in 6	1 in 76
Asthma	1 in 9	1 in 76
Chronic Ear Infection	s 1 in 10	1 in 76
Autism		
(with significant disab	oility) 1 in 25	1 in 76

^{*}Most children had not been professionally evaluated; therefore, reports of ADD, ADHD, and dyslexia were listed in one category.

A list of all reported conditions in order of decreasing frequency is given in Table 3.

Chronic Health Conditions Reported in 200 Children

Conditions	Vaccinated (124)	Unvaccinated (76)
Allergies	24 (19%)	8 (10%)
Behavioral and Learning Problems	20 (16%)	1 (1.3%
Asthma	14 (11%)	1 (1.3%)
Autism Spectrum Disorder (*)	13 (10%)	2 (2.6%)
Chronic Ear Infections	12 (10%)	1 (1.3%)
Digestive Issues	11 (9%)	0
Mood Disorders-Anxiety/Depression 11 (99)	0	
Migraines	8 (6%)	1 (1.3%)
Eczema	5 (4%)	0
Delayed Speech and Motor Development	4 (3%)	0
Anemia	3 (2%)	1 (1.3%)
Chronic Fatigue	3 (2%)	1 (1.3%)
Hypothyroid/Hashimoto's	3 (2%)	2 (1%)
Bladder Reflux	2 (2.6%)	0
Blood Sugar Issues	2 (1.6%)	0
Chronic Cough	2 (1.6%)	0
Insomnia	2 (1.6%)	0
Joint Pain	2 (1.6%)	0
"Never Well"	2 (1.6%)	0
Seizures	2 (1.6%)	0
Dieulafoy lesion	1 (0.8%)	0
Crohn's Disease	1 (0.8%)	0
Failure to Thrive	0	1 (1.3%)
Kawasaki Syndrome	1 (0.8%)	0
Deleted for Privacy 1 (0.8	%)	0

^{*} Autism Spectrum Disorder includes Asperger's syndrome, sensory processing disorder, and regression in speech (attributed by the parent to an MMR vaccine.)

Discussion: Of the four possible outcomes, the vaccinated sick were the most numerous. For the most part they were living normal lives, except for their chronic problems, many of which, such as ear infections, are practically considered normal

nowadays. Only the most severe autistic children would be called completely disabled. Fourteen of these 84 vaccinated children with health issues were fully vaccinated; 7 of them were born before 1983 when only 23 doses of 7 vaccines were being recommended.

Forty vaccinated children had no chronic health complaints. However only 4 of them were fully vaccinated. A common trend was to vaccinate the first child or children, and then to vaccinate less and less, until finally abandoning vaccines altogether.

Fifteen unvaccinated children had chronic health conditions. Their complaints can be seen in Table 3. The one child with asthma and the one with migraines were reported to have very mild symptoms. Allergies were reported in 8 unvaccinated children. One of these had Down's syndrome. Another had contracted a salmonella infection in infancy. Two unvaccinated children were on the autism spectrum; one with significant Asperger's symptoms and another with sensory processing disorder, but otherwise functioning quite well. One unvaccinated child with a vaccinated autistic sibling developed autistic mannerisms and regressed in speech after receiving an oral antibiotic. After his mother discontinued the medication he returned to normal, and was counted as a healthy unvaccinated child in this study.

80% of the unvaccinated children were healthy. Some were described as 'super healthy kids.' In a few families the unvaccinated were reported to catch acute illnesses easily, but recover completely.

Allergies or intolerances were the most common complaints in the vaccinated as well as in the unvaccinated children. Two children had severe reactions to peanuts and tree nuts. Both were vaccinated. There were many reports of difficulties tolerating

gluten and dairy products, both among the vaccinated and the unvaccinated. Several families of both groups described what sounded like phenol intolerances, which are not uncommon in children with behavioral and attention problems and children on the autism spectrum. Inhalants such as pollens and petrochemicals were also reported to cause problems. Allergies and intolerances of all kinds impact many conditions, such as attention deficit and hyperactivity, asthma, otitis media, digestive issues, the autism spectrum, and others.

Behavioral, attention, and learning problems comprised the next most numerous category on the chart. There was a marked difference in frequency between the vaccinated and unvaccinated children. Sometimes it is difficult to distinguish between the behavioral disorders and mildly affected children on the autism spectrum. In this study the opinion of the parent was recorded, although in some cases ambiguity existed.

The most disabling condition of any reported is autism. There were 15 children on the autism spectrum; 12 boys and 3 girls. Six of these were the eldest child of the family. Three families had more than one child on the spectrum. Thirteen of the children with autism and Asperger's syndrome were vaccinated. (One vaccinated autistic child actually received his diagnosis before his delayed vaccinations.) Two patterns were described; one in which the parent notices a problem from birth, and another in which the child apparently regresses in speech and development, often between the ages of one and two. The parents of one vaccinated child noticed problems early, before any vaccination. (This family had chosen to postpone the hepatitis B vaccine, given at birth since 1991.)

Six more vaccinated children had abnormal behavior that was also noticed early in life,

but following the hepatitis B vaccine. (One affected child was adopted, and the relevant information about when symptoms first occurred was not available.) All of the regressed children were vaccinated. Regression was reported in 5 children: 4 after the MMR vaccine, and one after his first set of vaccines at three months. Six of the children considered to be on the autism spectrum had relatively mild symptoms compared to the others, and would be called Asperger's syndrome rather than autism.

Patterns of response to vaccines could be observed among the families. In 10 families, every vaccinated child had a chronic health issue, and every unvaccinated child was healthy. These families could be described as 'vaccine susceptible.' Several of the healthy children from these families experienced new health challenges after being vaccinated as adults for travel or education programs. Children from such families might approach future vaccines with caution.

Another group might be called 'vaccine tolerant.' These are families in which one or more children are vaccinated and healthy, and those with chronic conditions have milder complaints such as allergies, rather than autoimmune disease or autism. Seven families met these criteria.

Another group is comprised of families with unvaccinated children with health problems. Twelve families are included in this group. A number of these parents happened to mention significant health problems of their own. While some parents reported good health, others suffered from cancer, autoimmune disease, Asperger's disorder, or reported past histories of alcoholism and eating disorders. Five of the 9 families with children on the autism spectrum were in this group, while the other 4 were

in the 'vaccine susceptible' group. Some of the parents of autistic children reported Asperger's disorder, celiac disease, inflammatory bowel disease, and histories of anorexia, bulimia, and alcoholism.

In 1983, 23 doses of 7 vaccines were recommended for school and daycare attendance. By 2017, the CDC was recommending, and many states were mandating 69 doses of 16 vaccines by the age of 18. (4). Following the National Childhood Vaccine Injury Act of 1986, many more vaccines began to be introduced. 1991 has been suggested as the year when the addition of new vaccines began to accelerate significantly. For comparison, the families were divided into 3 groups: 8 families of 41 children in which the vaccinated children were born before 1991, 22 families with 108 children in which the vaccinated children were born after 1991, and 5 families bridging the gap with children born before and after 1991. The percentage of chronic illness was similar, although the frequency of certain conditions was different. In this small study, all but one of the children on the autism spectrum were born after 1991, as were the children with an autoimmune condition, namely Crohn's disease and Kawasaki syndrome.

It is important to state that none of these parents were initially opposed to vaccination. Nearly all of them began by following their pediatrician's recommendations. A few refused the hepatitis B vaccine at birth, or delayed the vaccine schedule, but did carry it out. The parents were asked why they stopped vaccinating their children. The most common answer was that they had begun to educate themselves about vaccine components and safety. Some described a case of autism in a family known to them, which that family had ascribed to a vaccine. Some had moral objections to using

vaccines containing aborted fetal tissue. Some reported severe and frightening reactions to vaccines in their older vaccinated children, even if the reactions may have been temporary.

Limitations: The number of children is very small. Medical conditions were not verified with medical records. Excepting those born in the 1970's and early 1980's when the required vaccines were fewer, very few were fully vaccinated.

No one elected to receive the HPV vaccine.

Conclusions: Vaccines were associated with chronic health conditions in the children in this project. Different children obviously react differently to the same vaccines. A future goal might be to predict which children might react unfavorably to vaccines. The vaccine schedules could be modified by delaying or spacing vaccines, or exempting some children altogether. More and larger studies comparing vaccinated and unvaccinated children need to be done. This is not easy in the legal climate of today, with fewer exemptions available in many states. It is difficult to find parents willing to sign consent forms or volunteer their children's medical records if they could get in trouble for not vaccinating. This trend of increasing ill health in American children needs to be noticed and taken very seriously, and any possible contributing factor such as vaccines must be thoroughly and objectively investigated.

Here are some considerations for parents who decide not to fully vaccinate their children:

- 1. Pertussis is very dangerous for infants. Several of these families mentioned that they had used Dr. Suzanne Humphries' recommendations for using various forms of vitamin C when their children had pertussis.
- 2. Parents should be aware that doctors are not expecting to find diseases for which there are vaccines, and may not be quick enough to make a correct diagnosis.
- 3. The skill of home nursing should be resurrected. Too often the child is given an antibiotic and sent back to school. Sick children need care and rest.
- 4. Parents should let acute illnesses run their course and not suppress symptoms such as fever unless dangerously high.
- 5. Picky eating is very common. Many children have an inadequate diet, which the parents feel unable to change for the better.
- 6. Parents need to acquire some basic medical knowledge. One nurse believed that rotavirus vaccine was required because parents are not able to recognize and deal with dehydration, which may accompany diarrhea.
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